IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Previously Presented) An active matrix electroluminescent display device comprising an array of display pixels, each pixel comprising:

an electroluminescent display element;

a drive transistor for driving a current through the display element, a drive voltage being provided to the gate of the drive transistor;

and a storage capacitor for storing a drive level, said storage capacitor being connected between an input to the pixel and the gate of the drive transistor,

wherein a driver circuitry provides a stepped voltage waveform to the input of the pixel, the stepped voltage waveform being voltage-shifted by the storage capacitor before application to the

gate of the drive transistor, and wherein the height of the steps in the stepped voltage waveform is greater than the voltage width of a linear operating region of the drive transistor so that the linear operating region of the drive transistor is avoided.

2.(Previously Presented) The device as claimed in claim 1, wherein the height of the steps in the stepped voltage waveform is sufficient to include the linear operating region voltages of the drive transistors of all pixels of the display.

3.(Previously Presented) The device as claimed in claim 1, wherein the drive level is selected to have one of a plurality of values, and is selected such that any gate voltage for the drive transistor in the linear region corresponds to a voltage between steps of the voltage applied to the gate of the drive transistor.

4.(Previously Presented) The device as claimed in claim 1, wherein each pixel further comprises an address transistor, connected between a power supply line and the gate of the drive transistor.

5.(Previously Presented) The device as claimed in claim 4, wherein each pixel further comprises means for disabling the driving of current by the drive transistor through the display element.

6.(Previously Presented) The device as claimed in claim 5, wherein the means for disabling comprises an isolating transistor in series with the drive transistor and the display element.

7.(Previously Presented) The device as claimed in claim 4, wherein the device further comprises disabling means comprising a switch for switching the voltage on one terminal of the display elements of the array of pixels.

8.(Previously Presented) An active matrix electroluminescent display device comprising an array of display pixels, each pixel comprising:

an electroluminescent display element;

a drive transistor for driving a current through the display

element, a drive voltage being provided to the gate of the drive transistor;

an address transistor, connected between a power supply line and the gate of the drive transistor;

means for disabling the driving of the current by the drive transistor through the display element; and

a storage capacitor for storing a drive level, said storage capacitor being connected between an input to the pixel and the gate of the drive transistor,

wherein a driver circuitry provides a stepped voltage waveform to the input of the pixel, the stepped voltage waveform being voltage-shifted by the storage capacitor before application to the gate of the drive transistor, and wherein the height of the steps in the stepped voltage waveform is greater than the voltage width of the linear operating region of the drive transistor, wherein the device is operable in two modes:

a first mode in which a pixel voltage is applied to the input to the pixel, the address transistor is turned on, the disabling means is turned on to turn off the display element and the storage capacitor is charged to a level derived from the drive voltage; and

a second mode in which the address transistor is turned off, the disabling means is turned off and the stepped voltage waveform is applied to the input of the pixel.

9.(Previously Presented) The device as claimed in claim 1, wherein the device is operable in at least two sequential phases, one phase providing coarse resolution pulse width modulation and the other, shorter phase, providing fine resolution pulse width modulation.

10.(Currently Amended) A method of addressing an active matrix electroluminescent display device comprising an array of display pixels, each pixel comprising an electroluminescent display element, a drive transistor for driving a current through the display element, and a storage capacitor connected between an input to the pixel and the gate of the drive transistor, the method comprising the acts of:

storing a drive level on the storage capacitor;

providing a stepped voltage waveform to the input of the pixel, the stepped voltage waveform being voltage-shifted by the

storage capacitor before application to a gate of the drive transistor, such that for a first set of the voltage steps applied to the gate of the drive transistor, the drive transistor is turned on, and for a second set of the voltage steps applied to the gate of the drive transistor, the drive transistor is turned off, the first and second sets being determined by the stored drive level; and

avoiding a linear operating region of the drive transistor by having a height of the first set of the voltage steps being greater than a voltage width of the linear operating region of the drive transistor.

11. (Previously Presented) The method as claimed in claim 10, wherein the height of the steps in the stepped voltage waveform is greater than the voltage width of the linear operating region of the drive transistor.

12. (Previously Presented) The method as claimed in claim 11, wherein the height of the steps in the stepped voltage waveform is greater than the voltage width of the overlaid linear operating

region voltages of the drive transistors of all pixels of the display.

13. (Previously Presented) The method as claimed in claim 10, wherein the drive level is selected to have one of a plurality of values, and is selected such that any gate voltage for the drive transistor in the linear region corresponds to a voltage between steps of the voltage applied to the gate of the drive transistor.

14. (Previously Presented) The method as claimed in claim 10, wherein the act of storing a pixel drive level on the storage capacitor comprises turning on an address transistor connected between a power supply line and the gate of the drive transistor and charging the storage capacitor using the address transistor.

15. (Currently Amended) A method of addressing an active matrix electroluminescent display device comprising an array of display pixels, each pixel comprising an electroluminescent (EL) display element, a drive transistor for driving a current through the display element, and a storage capacitor connected between an

input to the pixel and the gate of the drive transistor, the method comprising:

storing a drive level on the storage capacitor;

providing a stepped voltage waveform to the input of the pixel, the stepped voltage waveform being voltage-shifted by the storage capacitor before application to a gate of the drive transistor, such that for a first set of the voltage steps applied to the gate of the drive transistor, the drive transistor is turned on, and for a second set of the voltage steps applied to the gate of the drive transistor, the drive transistor is turned off, the first and second sets being determined by the stored drive level;

disabling the driving of the current by the drive transistor through the display element during the storing of a pixel drive level on the storage capacitor;

in a first mode in which a pixel voltage is applied to the input to the pixel, turning on the address transistor, turning off the display element, and charging the storage capacitor to a level derived from the drive voltage; and

in a second mode in which the address transistor is turned off, applying the stepped voltage waveform to the input of the

pixel.

16. (Previously Presented) The method as claimed in claim 10, wherein the device is operable in at least two sequential phases, one phase providing coarse resolution pulse width modulation and the other, shorter phase, providing fine resolution pulse width modulation.

17. (Previously Presented) The method as claimed in claim 16, wherein the stepped voltage waveform to the input of the pixel has the same voltage levels in the two phases, and the shorter phase has shorter step transitions.